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ABSTRACT

This document is a monograph in a personnel development series addressing issues that are pertinent for policy-making personnel concerned with preservice personnel preparation of vocational/special educators. Section 1 presents a review of the selected literature related to the development of personnel preparation programs and the results of a survey of existing preservice programs to prepare personnel in the area of vocational programming for special needs learners. (The survey determined design and implementation procedures of these programs.) Section 2 presents a three-stage systems approach to program development and suggests activities for implementing each stage related to the area of vocational programming for special needs learners. These three stages are outlined: program planning, program implementation, and program evaluation. Appendixes contain the interview form used in the program survey and the names and addresses of the directors of personnel preparation projects funded by the Office of Special Education in the area of career/vocational programming. (YLB)

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Vocational Education for the Handicapped: Perspectives on Preservice Personnel Preparation

Personnel Development Series: Document 8

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May 1982

FOREWORD

Over the past decade the problems and difficulties that face handicapped youth in their efforts to obtain and maintain employment have been widely documented by researchers, public policy analysts, and advocacy organizations. In the 1970s the U.S. Congress enacted several pieces of education, training, and employment legislation to focus, in part, on resolving these probiems. The Education for All Handicapped Children Act of 1975, along with the Vocational Education Amendments of 1976, the Comprehensive Employment and Training Act of 1978, and several civil rights initiatives, placed priority upon assuring that handicapped youth receive appropriate vocational education programs and services. These various pieces of legislation acknowledged the concurrent need for staff development and teacher education programs to assure that effective programs and services are delivered. Within the vocational education, special education, rehabilitation, and CETA systems there are nearly a million professionals--the vast majority of whom have limited or no expertise in planning and providing comprehensive vocational programs and services for disabled youth and adults. The need for training programs to update teachers, support personnel, counselors, coordinators, and administrators is great. There is also an enormous need for training other individuals (such as employers, parents, advocates, co-workers, non-disabled peers) if youths with special needs are to be successful in their transition from school to work.

Planning and conducting effective personnel development programs that serve the career development needs of handicapped youth involves a variety of complex tasks. Developing appropriate interagency, collaborative training arrangements is essential to insure that current knowledge and expertise is

utilized from the fields of vocational education, special education, rehabilitation, career development, and employment and training. Decisions must be made relative to the specific training needs of the target audience. Frequently, the needs of inservice practitioners must be considered along with the needs of trainees who are preparing to enter the field for the first time. The question of student needs is also present. The process of providing vocational education for severely handicapped youths is, by nature of the students served and the training technology, considerably different from training mildly handicapped youth. Other critical dimensions related to the content of personnel development encompass such areas as: vocational assessment, career guidance, and evaluation of training programs. The need for and patterns of personnel certification in the field of vocational/special education is also a continuing concern for personnel development programs.

During 1980-82 the University of Illinois hosted a series of three conferences which focused upon improving personnel preparation programs in vocational/special education. These conferences were conducted as part of the Leadership Training Institute/Vocational and Special Education, which was supported by a grant from the Division of Personnel Preparation, Special Education Programs, U.S. Department of Education. As individuals responsible for personnel preparation programs in vocational/special education met and shared their experiences and concerns, a clear need emerged for a series of monographs on designing, implementing, and evaluating personnel development programs. The need to address the critical questions and identify effective policies and practices related to personnel development was obvious following the initial conference held in Champaign, Illinois in April 1980. The project staff used a small advisory group of individuals attending the conferences to outline the Perspectives monograph series. Needs assessment data

collected during and prior to the first conference was used by the group in identifying the major topics to be addressed in the series. Staff involved in the vocational/career education projects funded by the Division of Personnel Preparation were then invited to become members of the various monograph writing teams. Under the expert guidance of Dr. Janet Treichel, LTI Training and Dissemination Coordinator, the writing teams formulated their monographs to focus on such core components as: present state-of-the-art, effective policies and practices, and guidelines for personnel development programs. Dr. Treichel coordinated the planning and preparation of the series in a highly exemplary manner. Her leadership, commitment to excellence, and professional insight were valuable assets in editing this series.

The monograph topics in the Perspectives on Personnel Development series include: Special Populations/Severely and Moderately Handicapped, Certification, Program Evaluation, Effective Interagency/Interdepartmental Coordination, Inservice Personnel Development, Vocational Assessment, Preservice Personnel Preparation, and Career Development/Guidance.

We anticipate that the monographs will be useful resource documents for a variety of audiences. Teacher educators and administrators in higher education will find the series helpful in planning both preservice and inservice programs for special educators, vocational educators, counselors, educational administrators, rehabilitation specialists, and others. State education agencies involved in certification, personnel development, and program administration will find strategies, and suggestions for reviewing, evaluating, and formulating teacher training efforts in local agencies and universities. The monographs are also a rich source of ideas for parent and advocacy groups and professional associations as they seek to improve the knowledge and competence of personnel serving handicapped youth.

This series represents a significant compilation of important and timely perspectives on personnel development in vocational/special education. It contains the wisdom and insight of nearly 50 leaders in the field. We feel it will be a valuable and important resource in improving the "appropriateness" of the programs and services received by the handicapped youths of our nation.

L. Allen Phelps
Director
Leadership Training Institute/
Vocational and Special Education

George Hagerty
Project Officer
Division of Personnel Preparation
U.S. Department of Education

PREFACE

The Perspectives on Personnel Development series has become a reality due to the efforts of a number of individuals. These people were highly instrumental in the development, planning, and publication phases of the monographs.

Appreciation and gratitude is extended posthumously to Margaret (Meg) Hensel. Meg was actively involved in assisting in planning for the personnel preparation conferences and the initial developmental stages for this series. We will continue to miss her enthusiasm and dedicated efforts.

The LTI is indebted to Dr. Patricia L. Sitlington, Indiana University, Dr. David Malouf and Ms. Juliana Taymans, University of Maryland, and Dr. Ella Bowen, University of Michigan, for their excellent work in developing this monograph. This document addresses a number of issues that are pertinent for policy-making personnel concerned with preservice personnel preparation.

The reviewers for the Perspectives series also made important and significant contributions. Dr. Gary Clark of the University of Kansas reviewed each monograph in the series. Dr. Jacque Robinson, Kent State University and Dr. Nancy Hartley of Northern Colorado University served as reviewers for the Perspectives on Preservice Personnel Preparation monograph. Their insightful comments and suggestions were very helpful in the preparation of the monograph.

Sincere appreciation is expressed to Ms. Alicia Bollman, Ms. Lilian Del Barco, and Ms. June Chambliss for their dedicated efforts and patience in providing the secretarial expertise necessary to produce this volume.

Janet Treichel, Editor
Coordinator, Training and Dissemination
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As one looks at the field of preservice personnel preparation in the area of vocational programming for the special needs learner, one finds administrative arrangements and delivery systems as varied as the universities and colleges engaged in such personnel preparation. Part of this diversity is caused by the characteristics of the institutions and the departments or units within these institutions. A segment of this diversity is also caused by the variety of vocational programming options currently existing in the field for the special needs learner; these are the programs in which personnel must be prepared to function.

When the writing team was charged with the task of preparing a monograph related to preservice training for the Perspectives on Personnel Development series, we weighed many alternative approaches for conveying the knowledge necessary to set up such a preservice personnel preparation program, while still allowing for individual differences in program resources and population to be trained. In selecting the approach used in this monograph we acted on three basic premises:

1. Preservice personnel preparation programs are those programs leading toward a degree and/or certification and based primarily at a university or college campus.

2. The program design, implementation procedures, and content appropriate for a given institution are related to the personnel needs of the geographic area being served and the strengths and limitations of the college or university.

3. The most efficent method of presenting the diversity of skills and knowledge needed to develop a preservice personnel preparation program is to present: (a) the program design options currently being utilized in the field; and (b) a systematic method for coordinating the program development process.

The first section of this monograph presents a review of the selected literature related to the development of personnel preparation programs and

the results of a survey of existing programs to prepare personnel in the area of vocational programming for the special needs learner. The second section presents a three-stage systems approach to program development and suggested activities for implementing each stage related to the area of vocational programming for the special needs learner. Finally, the Appendixes contain the interview form used in the program survey and the names and addresses of the directors of personnel preparation projects funded by the Office of Special Education in the area of career/vocational programming. Professionals currently embarking on program development efforts in this area are strongly urged to contact these individuals for assistance.

Patricia L. Sitlington

SECTION ONE

A Survey of Preservice Programs Preparing Personnel in the Area of Vocational Programming for the Special Needs Learner

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The area of vocational programming for the special needs learner has been strongly influenced by the passage of three pieces of federal legislation: (a) The Rehabilitation Act of 1973 (Public Law 93-312), (b) The Education of All Handicapped Children Act of 1975 (Public Law 94-142), and (c) the Vocational Education Act of 1963, as amended in 1976 (Public Law 94-482). The combined influence of these measures mandates an appropriate education for the special needs learner in the least restrictive environment, and that state and local agencies ensure that special needs learners have available to them the same variety of programs and services that are available to every student --including vocational education (Halloran, Foley, Razeghi, & Hull, 1978).

If a range of appropriate vocational programming options is to be made available to the special needs learner, personnel qualified to design, implement, and evaluate these programs must be prepared and made available to the state, local, and private agencies conducting these programs. Moreover, these personnel must be able to communicate and cooperate with the other disciplines involved in vocational programming for the special needs learner.

Universities, historically responsible for preservice preparation of personnel, have begun to respond to this need. Two national conferences at the University of Illinois at Urbana-Champaign (January and October 1976) and one at the University of Kentucky (March 1977) brought vocational and special education teacher educators together to stimulate communication and cooperation between the two fields. Regional, state, and local conferences have also been held, many as spin offs of these national efforts.

In discussing the state of the art of programs preparing personnel to work with the special needs learner in vocational programs, Clark and Evans

(1977) identified three main sources of influence: (a) professional dissatisfaction; (b) leadership groups, such as Congress and state legislatures, U.S. Office of Education, state departments of education, and professional organizations; and (c) current trends and issues such as career education, mainstreaming, and competency-based teacher education.

Concerns and Guidelines in Developing Personnel Preparation Programs

Although universities are moving to meet the personnel preparation needs of the field, this motion is not always smooth. In their state of the art paper Clark and Evans (1977) identified the following as possible barriers in establishing preservice programs to prepare vocational special needs personnel: (a) structure and attitude of separate mission within the special education and vocational education departments of a given university; (b) shortage of vocational special needs personnel, leading local education agencies to hire unqualified people to teach; (c) rigid state teacher certification or endorsement requirements, leaving little or no room for addition coursework and usually making certification in both special and vocational education almost impossible; (d) effort needed to gain approval of new or modified teacher education programs; (e) lack of needs assessment data on which to base program development; (f) barrier to joint appointment of faculty members, such as problems in obtaining promotion and lack of professors qualified in both fields; and (g) the increasing diversity of the special needs population in vocational education.

Clark (1977) states that the key to success in coordinating personnel preparation programs for those involved in vocational programming for special needs learners is the successful determination of (a) "appropriate education" for special needs students in secondary and postsecondary settings; and (b) "appropriate training" for those who will carry it out. In his article, Clark

suggests strategies to enhance cooperative planning and/or programming between disciplines. Among these strategies are administrative support, participatory planning, and the development and evaluation of a written plan of action. Hartley (1977) also lists strategies for the development of personnel preparation programs.

Phelps and Clark (1977) identify seven areas to be addressed during program planning and development: (a) needs assessment; (b) program design; (c) program content and methods; (d) practicum experiences; (e) certification; (f) evaluation; and (g) staff selection and development. They also point out the need to recognize the existing roles vocational special needs personnel are currently playing in the field and to determine for which of these roles program trainees will be prepared.

The purpose of this study was to determine as clearly and accurately as possible the program design and implementation procedures being followed in preservice personnel preparation programs currently receiving funding from the Office of Special Education (formerly Bureau of Education for the Handicapped), U.S. Department of Education in the area of vocational/career education.

Resources for Personnel Preparation

Several publications are available in the area of preparation of vocational special needs personnel. Albright (1977) and Wentling, Peak, Jensen, and Russo (1978) present and describe the major resources available to the teacher educator in the area of vocational special needs, both in terms of personnel preparation concerns and background information on vocational programming for special needs students.

Parrish and Kok (1980) review personnel preparation programs from 23 universities and present courses offered and course syllabi from these courses.

Abbas and Sitlington (1976) identify major issues of concern within the fields of vocational and special education and abstract articles discussing these issues.

Albright and Clark (1977) present perhaps the most comprehensive publication. In this publication they reprint the major position and resource papers in vocational special needs personnel preparation and provide examples of university-based personnel preparation programs in this area. They also include samples of project action plans developed at the 1976 and 1977 National Teacher Education Workshops on Vocational Education for Special Needs Students. Three additional publications (Griffin et al., 1979; Leadership Training Institute/Vocational and Special Education, 1981; Teacher Education Directory: Vocational Special Needs Personnel, 1978) present abstracts of current vocational special needs personnel preparation programs and addresses of contact persons for these programs.

Previous Surveys of Existing Programs

Specifically three major studies have been conducted to determine the "state of the art" in programs to prepare personnel in the area of vocational programming for the special needs learner. In 1977 Brock compiled a monograph delineating programs that had been conceptualized and those that were operational. In 1979 Brock published a controlled replication of the 1977 monograph using a questionnaire mailed to over 400 persons in the 50 states and Canada. This group included all project directors of grants funded by the then Bureau of Education for the Handicapped in the area of career and vocational education for the handicapped, and every college or university chairperson in special or vocational education. Brock's questionnaire addressed four basic areas: (a) degrees and/or teacher certifications awarded; (b) required coursework areas and approximate number of credits in each;

(c) number of students graduated in the last year; and (d) brief program description. The 1977 study included 25 existing programs. In the 1979 study 36 programs were identified at 25 separate institutions of higher education, with 23 of these programs indicating that coursework led to a degree in the area of vocational programming for the special needs learner. Specific summaries were not given of the departmental affiliations of these programs, but from the program descriptions provided the following trends emerged:

a. Ten of the programs (43 percent) offered a degree solely in vocational education at the doctoral (3), masters (5), and undergraduate (2) levels;

b. Seven of the programs (30 percent) offered a degree solely in special education at the masters (4) and undergraduate (3) levels;

c. Four programs (18 percent) offered a degree in either vocational or special education at the doctoral (1), masters (1), or undergraduate (2) level; and

d. Two programs offered a degree in other departments within the college, with one at masters and one at the undergraduate level.

Coursework required in these programs was reported by general curriculum areas rather than specific course titles. In both the 1977 and 1979 studies, special education and vocational education coursework were the major concentration areas followed by general studies, electives, and regular education content. From this data, Brock (1979) concluded that the area of preparing vocational and special education personnel to work with special needs students was in dynamic transition, with a 179 percent increase in student enrollment (from 886 to 1507 trainees) from the 1977 to the 1979 survey.

Griffin, Clelland, Pynn, Smith, Adamson, and LaCasse (1979) collected information on a total of 86 personnel preparation projects, including 27 projects funded by the Bureau of Education for the Handicapped, state education agencies, and projects referred by these groups. Of these 86 projects, 39 provided only inservice, 6 only preservice training, and the reamining 41

a combination of both. Data were not reported separately for preservice versus inservice programs.

A majority (46) of the programs were under the administration of vocational education, with 40 of these projects at colleges or universities, and 6 at state agencies. Twenty-six programs were administered through special education, with 17 of these located at colleges or universities and 9 at state agencies or regional centers.

These projects reported funding from a variety of sources. Since some projects were funded by more than one source, the total count for funding agencies equaled 112. In this count, the Division of Personnel Preparation, Bureau of Education for the Handicapped (BEH), was the major source of federal funds (N=27 responses), followed by funds provided by the Education Professional Development Act (EPDA) with nine responses. State departments of vocational or special education funded 29 projects and universities funded 20 projects internally.

Of the 332 full-time staff positions reported, 145 staff members had credentials in vocational education, 105 were credentialed in special education, and 39 in a combination of special and vocational education. Approximately 30 percent of the students enrolled in these programs came from special education backgrounds, with another 30 percent from vocational education backgrounds. Griffin et al. (1979) concluded that these programs were preparing special educators to deliver prevocational training and vocational educators to serve the mildly and moderately handicapped in mainstreamed settings.

Method

The current study attempted to determine the program design and implementation procedures being followed in preservice personnel preparation programs in vocational/career education funded by the Office of Special Education in 1980-81. Using program abstracts, the investigators identified a total of 36 programs whose primary mission was determined to be preservice personnel preparation (i.e., preparation leading toward a degree and/or certification and based primarily on a university campus). Five of the 36 programs could not be reached, even after several attempts, and were not included in this study.

The directed telephone interview was used as the method of gathering information in this study. Although time consuming, this approach was chosen to increase the response rate over that of a mailed questionnaire and to accommodate the anticipated range of program structures and approaches. Specific questions were included to direct the interview to the areas of concern. One of the three investigators contacted each project director by telephone and asked him/her the questions contained on the form. Frequent conversations were held among investigators regarding procedures used and questions arising in the interviews to insure inter-investigator reliability.

Results and Discussion

The results of the study will be presented and discussed under the following headings: (a) basic program orientation, including administrative affiliaton of the program and certification/endorsements granted; (b) background and requirements of students enrolled in the programs; (c) faculty backgrounds and appointments; (d) operational considerations; (e) program goals; (f) training approaches; (g) course and practicum requirements; and (h) post-training placement outcomes.

Basic Program Orientation

The first section of the interview form dealt with the basic orientation of the programs--specifically where the program was administratively based, the degrees conferred at completion of the program, and the certification and/or endorsements attached to the program.

Of the 31 programs surveyed, 17 (55 percent) were based administratively in special education, eight (26 percent) jointly between special education and vocational education (includig industrial arts), and one in vocational education. Four other programs included multi-department arrangements, with two across the school or college of education, one in a department housing such areas as special education and guidance and counseling, and one between vocational education and the school of education. One additional program was housed in a research center.

The large number of programs affiliated soley with departments of special education may be an indication that the leadership in the area of vocational special needs programming is being assumed largely by professionals with

special education backgrounds. This statistic may be influenced, however, by the fact that all of the programs surveyed were funded through the Office of Special Education--an agency much more familiar to special educators than to vocational educators. It is encouraging to note that eight programs were housed jointly between the two disciplines.

The second question concerned the level of degrees attached to the programs and the departments with which these degrees were associated. Table 1 presents the total number of programs that offer degrees at the various levels and the departments in which these programs are housed.

Table 1

Number of Programs Offering Degrees (Level of Degree*) By Department

	Voc. Ed. or Spec. Ed.	Spec. Ed. Only	Voc. Ed. Only	Across College/ Other
Ph.D/Ed.D (total = 9)	1 (11%)	7 (78%)	0 (0%)	1 (11%)
Ed.S. (Specialist) (total = 10)	4 (40%)	6 (60%)	0 (0%)	0 (0%)
Masters (total = 27)	8 (30%)	16 (59%)	2 (7%)	1 (4%)
BS/BA (total = 9)	0 (0%)	6 (67%)	2 (22%)	1 (11%)
TOTAL (55)	13 (24%)	35 (64%)	4 (7%)	3 (5%)

*Some departments offer more than one degree level.

As would be expected from the results of the first question, the largest number of degrees (64 percent) were granted in special education only, with 24 percent of the degrees granted in situations where the student could choose to major in special or vocational education.

As can be seen from Table 1, the association of degrees with departments varies among degree levels. At the doctoral level, 78 percent of the programs (7 programs) grant degrees in special education only, with only 11 percent (1 program) offering the vocational or special education degree option. Although degrees from special education departments still exceed others at the specialist and masters level, the gap is slightly closed with the vocational or special education degree option available in 40 percent of the programs at the specialist level and 30 percent of the programs at the masters level. At the undergraduate level special education degrees again dominate with 67 percent of the programs issuing only that degree. The small number of programs included at the doctoral, specialist, and undergraduate level, however, warrant some caution in generalizing the results. It is interesting to note, however, that although the greatest number of programs (49 percent) are involved with masters level programming, there is a variety of programming efforts at each of the degree levels. Obviously, many of the programs surveyed are involved at more than one of these levels.

The final question in this section concerned the certifications or endorsements granted by the surveyed programs. As can be seen in Table 2, 16 programs (50 percent) granted some type of special education credential only, while one program (3 percent) awarded an endorsement or certificate only in vocational education. Three of the programs (9 percent) offered credentialling in either special or vocational education (depending upon the

Table 2

Certification or Endorsements Awarded

Type of Credential	Number (Percent) of Programs*
Special Education (only)	16 (50%)
No Credential	8 (25%)
Vocational Special Needs	4 (13%)
Either Special or Vocational Education	3 (9%)
Vocational Education (only)	1 (3%)

* Note: Since one program offered two credentials, programs total to 32. Percentages were also computed on this number.

student's major emphasis), and four programs (13 percent) offered a specialized credential in the area of vocational programming for the special needs learner. Three of the programs offered this as their only credential and one awarded it along with a special education credential. The predominance of special education credentials would be expected since the majority of the programs were associated with special education departments. (Note: A question was included on the interview form regarding certification options within the individual states. There is, however, a separate monograph in the Perspectives on Personnel Development Series on this topic, so this issue will not be presented here.)

Background and Requirements of Students Enrolled in Programs

The second section of the interview form dealt with the requirements of existing programs in terms of certification, previous degrees, or experience demanded of students before they entered a given program. The entering requirements of the 30 graduate level programs surveyed (one program was undergraduate level only) are summarized in Table 3.

Table 3

Entering Requirements for Students

Requirement	Number (Percent[a]) of Programs	
Previous Certification or Degrees Required		
None	15	(50%)
BA/BS in Special Education, Vocational Education, or Related Field	8	(27%)
Teaching Certificate in Any Field	6	(20%)
Masters in Special Education, Vocational Education, or Related Field	1	(3%)
Previous Experience Required		
None	20	(67%)
Teaching or Administration	8[b]	(27%)
Industry or Sheltered Employment	2	(6%)

[a]Percents computed on the 30 programs surveyed that were involved in graduate programs.

[b]Two of these programs also accepted industry or sheltered employment experience.

Half of the programs do require some type of specific undergraduate major or teaching certificate other than a general BA or BS degree. Nine (30 percent) of these programs require previous preparation in special education, vocational education, or a related field. An additional 20 percent of the programs require a teaching credential of some type. In the area of experience it is interesting to note that 67 percent (N=20) of the programs require no previous experience before entering the program. Many of the program coordinators felt that they could provide the needed experience through the structure of their program.

In a related question during the interview, the program coordinators were asked to estimate the percentage of graduate students in their program with the following backgrounds: (a) special education, (b) vocational education, (c) school psychology/counseling, and (d) non-education (i.e., social science, rehabilitation). Regular education emerged as an additional category during the interview process. Table 4 represents an attempt to systematically report these estimates. In reporting the wide range of backgrounds, an attempt was made to look for trends in combinations of backgrounds and to note meaningful percentages of students. It should be remembered that these are only estimates on the part of the project directors interviewed.

Table 4

Background of Students

Percent of Students with Given Background	Number (Percent of Programs)
Over 90% of Special Education	4 (13%)
Over 90% Vocational Education	2 (7%)
50% Vocational/50% Special Education	8 (27%)
75% Special/25% Vocational Education	5 (17%)
75% Vocational/25% Special Education	1 (3%)
50% Regular/50% Special Education	2 (7%)
75% Special Education/25% Non-Education	2 (7%)
75% Vocational Education/25% Non-Education	1 (3%)
75% Special Education/25% Combination Non-Education, Vocational Education, Regular Education, Counseling	5 (16%)

It is encouraging to note that 24 (80 percent) of the programs have students from more than one background area, although the predominant background of the students in most of these programs still remains special education. It should be pointed out that students with backgrounds other than vocational and special education are being recruited into these programs. These backgrounds include non-education, such as rehabilitation and social work; school psychology and counseling, and regular education. One program also indicated a small number of their students had backgrounds related to personnel hiring in industry. In addition to the number of students with

other backgrounds indicated in Table 4, many of the programs listing major percentages of students from vocational or special education also reported smaller percentages (1 to 10 percent) of students with these non-traditional backgrounds.

Faculty Backgrounds and Appointments

A critical concern in the development of personnel preparation programs such as those surveyed here is the identification of faculty persons who are qualified to administer and deliver training in this area. The shortage of trained teachers in vocational special needs both results from and contributes to a shortage of qualified teacher trainers. This "chicken and egg" predicament is further complicated by the multidisciplinary nature of this area.

The surveyed programs were asked to report on the training backgrounds of the faculty persons involved in primary roles of instruction and administration. Among the total of 90 primary faculty persons, the most common training background was special education (40 percent), followed by vocational special needs or dual vocational/special education training (28 percent), and vocational education alone (18 percent). A full listing of faculty backgrounds is displayed in Table 5. The faculty persons with vocational special needs or dual vocational/special education training were widely distributed among the surveyed programs. Twenty programs (65 percent) reported employing at least one such person. This finding suggests that substantial progress has been made in developing faculty qualifications in this specialized area.

The majority of surveyed programs involved combined efforts of primary faculty persons with different training backgrounds. The most common pattern, reported by 14 (45 percent) of the programs, was to employ one or

Table 5

Faculty Training Backgrounds

Background	Number (Percent) of Faculty
Vocational Special Needs (or dual training in special education and vocational education)	25 (28%)
Vocational Education	16 (18%)
Special Education	36 (40%)
Counseling or School Psychology	7 (8%)
Rehabilitation	3 (3%)
Special Education and Rehabilitation (dual training background)	2 (2%)
Special Education and Guidance (dual training background)	1 (1%)
TOTAL	90 (100%)

more persons with vocational special needs or dual vocational/special education training, and one or more persons with training in special education, vocational education, rehabilitation, and/or counseling. Six programs (19 percent) reported employing only faculty with vocational special needs or dual

vocational/special education training. Another six programs reported employing only faculty with special education backgrounds. Finally, five programs (16 percent) reported employing faculty members trained in special education in combination with faculty members trained in vocational education, rehabilitation, or counseling. This final pattern suggests the possibility of operating a successful training program by means of interdisciplinary collaboration in the absence of faculty persons with vocational special needs training.

Fifteen of the surveyed programs employed faculty in two or three different departments. In six of the programs this was accomplished by means of joint appointments of faculty persons to special education and vocational education departments. As indicated in Table 6, a total of eight faculty

Table 6

Faculty Appointments

Department	Number	(Percent of Total) of Faculty
Vocational Education	21	(24%)
Special Education	45	(52%)
Joint Appointment with Vocational Education & Special Education	8	(9%)
Counseling	4	(5%)
Department Combining Special Education, Counseling, School Psychology, Etc.	9	(10%)
TOTALS	87	(100%)

persons (9 percent) held such joint appointments. In other programs, faculty members were fully appointed to only one department, most commonlyspecial education (52 percent) followed by vocational education (24 percent). The difficulties inherent to joint appointments were discussed by Clark and Evans (1977). It appears that such appointments are not the only, or even the preferred means for achieving interdepartmental faculty linkages.

Operational Considerations

Two questions in the interview were concerned with some basic operational aspects of personnel preparation programs. The first question was on the use of advisory committees in developing, implementing, and evaluating vocational special needs preservice personnel programs. Twenty-three (74 percent) of the programs had such an advisory committee, although for one of these programs the committee worked with the general program as well as the vocational special needs program.

The composition of these committees varied as the needs of the programs varied. Basically two main types of committees emerged. The first type was an internal university-based advisory committee (including department heads and/or deans from the departments or schools involved in the program), faculty from these departments or schools, and former or current trainees. The second type of advisory committee involved a much broader range of members. Members of these committees tended to represent the following categories: (a) special and vocational education administrators from the local area; (b) state department personnel in vocational and special education; (c) faculty from departments/schools involved at the university level; (d) personnel working in the area of vocational programming in the area agencies, such

as vocational and special education teachers, rehabilitation counselors, and CETA staff members; (e) current and former trainees; and (f) local business personnel. In addition some advisory committees also included: (a) parents of special needs learners; (b) special needs adolescents and adults; and (c) faculty from postsecondary institutions, such as community colleges and vocational technical schools.

The second question in the area of operational considerations dealt with methods used to recruit trainees for the personnel preparation programs. The most commonly used methods were: (a) "word of mouth," especially current students telling others about the program; (b) brochures; (c) mailings to local education agencies; (d) presentations at conferences and inservice workshops; (e) notices in newsletters of state and local organizations; (f) announcements during courses in other departments; (g) working with undergraduate student advisors; and (h) recruitment efforts of advisory committee members. Undergraduate programs also often recruited from high school and junior college programs.

Program Goals

A number of personnel preparation goals can be addressed by programs such as those discussed here. One possible goal is suggested by Phelps and Clark (1977): "To insure that a broad range of occupational exploration and preparation options are open to special needs learners, vocational educators in all of the traditional fields (agriculture, business and office, distributive, health, home economics, and industrial education) must be prepared to serve the special needs learner." A parallel argument has been made that special educators should be more generally equipped with competencies to facilitate student growth in the career/vocational area (Brolin, 1973; Miller, Sabatino &

Larsen, 1980). Thus, training programs can address the goals of (a) equipping vocational educators with a background in special education, or (b) equipping special educators with a background in career and vocational education. A third possible goal is to prepare trainees to fill "specialist" positions such as work experience coordinators, vocational education resource or support teachers, and vocational evaluators. A fourth possible goal is to prepare trainees for leadership roles.

The surveyed programs were asked to identify roles for which their students were being prepared, to rank roles if more than one were identified, and to specify roles by degree levels if two or more degrees were offered. Most of the programs reported more than one goal. The most frequently reported primary goal was to prepare students as special educators with some background in vocational education (74 percent of the programs), followed by preparing students as vocational educators with some background in special education (48 percent), and preparing students for vocational special needs specialist roles (42 percent). Tables 7 and 8 present a more detailed breakdown of role designations.

Leadership training was identified as a primary goal at the graduate level only. At the doctorate level, in four of the five programs identifying leadership as a primary goal, it was the only identified doctoral goal. In contrast, at the masters level in four of the five programs identifying leadership as a primary goal, it was combined with other primary goals. The need for leadership training in vocational special needs has been discussed (Malouf & Taymans, in press), and it appears that the surveyed programs addressed this need in two ways: (a) by preparing doctoral students for leadership roles, and (b) by preparing masters students with leadership skills which could be applied in roles in which leadership was not the only function.

Table 7

Numbers of Programs Identifying Specified Roles as Primary or Secondary Training Goals (Percents in Parentheses)

Role	Primary Goal	Secondary Goal
Vocational Special Needs Leadership Roles	9 (29%)	5 (16%)
Vocational Special Needs Specialist Roles	13 (42%)	6 (19%)
Vocational Educator With Some Background in Special Education	15 (48%)	3 (10%)
Special Educator With Some Background in Vocational Education	23 (74%)	3 (10%)

Table 8

Frequencies With Which Specified Roles Were Identified As Primary Training Goals at Various Degree Levels

	Vocational Special Needs Leadership Roles	Vocational Special Needs Specialist Roles	Vocational Educator With Some Background in Special Education	Special Educator With Some Background in Vocational Education
Doctoral	5	1	1	3
Educational Specialist	3	3	3	4
Masters	5	10	10	18
Undergraduate	0	2	7	7

Training Approaches and Course Requirements

The surveyed programs were asked whether their training was offered in the form of separate degree programs or as emphasis areas within more general degree programs. Further, they were asked if their training was delivered by means of separate courses in vocational special needs or by infusion of content into existing courses. Only six programs (19 percent) reported

offering separate degree programs. It was much more common for training to be offered as emphasis areas within degree programs. This finding may reflect the difficulty often encountered in having new degree programs approved, or it may indicate that separate degree programs are not considered to be needed in this area.

Separate courses were offered by 94 percent of the programs, while infusion of content was used in 55 percent. Only one program used infusion as its only means of instruction. The majority of programs used both approaches. The number of separate courses offered ranged from one to ten, with a mean of three and a mode of two courses.

The programs were asked to indicate the types of courses they required. Table 9 presents the course requirements arranged in three catagories: courses specific to vocational special needs, regular vocational education courses, and regular special education courses. The most common pattern was to require courses in all three categories (13 programs--45 percent) followed by the pattern of requiring only courses specific to vocational special needs (12 programs--41 percent). Less common patterns were to require combinations of vocational special needs plus regular vocational education courses (2 programs--7 percent) and vocational special needs plus regular special education courses (2 programs--7 percent). Only four programs reported having systematically different training sequences depending on student background (special education or vocational education). This is surprising in light of the mixtures of student backgrounds typically found in these programs.

Respondents were also asked to describe the types of practicum/field experiences that were required for their students. Thirty (97 percent) of the 31 programs reported requiring some type of field experience. These

experiences included: (a) occasional visits to selected programs, (b) actual instructional experiences in one-to-one, small group, large group, and full time student teaching/internship experiences, and (c) leadership and policy experiences and internships. Additional notable approaches were the use of self-assessments as a basis for selecting field experiences, and the systematic sequencing of field experiences with regard to context (e.g., tutorial, small group, large group) and topic (school and community screening and analysis, vocational evaluation, curriculum development methods and materials, and program implementation).

Table 9

Course Requirements

Type of Course	Number of Programs Requiring This Type of Course
A. Specific to Vocational Special needs	
1. Background course in vocational programming for special needs	25
2. Methods course	21
3. Vocational assessment	12
4. Advanced seiminar	5
5. Leadership	1
6. Advocacy	1
7. Laboratory course	2
8. Program implementation and coordination	1
9. Industrial arts and special education	1
10. Guidance	2
11. Occupational therapy	1
B. Regular Vocational Education Courses	
1. Introduction to vocational education	14
2. Career education	3
3. Supervision and administration	4
C. Regular Special Education Courses	
1. Introduction/characteristics	11
2. Secondary methods	6
3. Assessment	5
4. Psychology of adolescent handicapped	1
5. Behavior management	2
6. Families	1

The most common types of practicum/field experiences reported are listed in Table 10. These settings appear to mirror the scope and diversity of service delivery options being developed for the special needs learner.

Table 10

Practicum/Field Experience Settings

1. Regular secondary programs (non-vocational)
2. Regular industrial arts and vocational education programs
3. Secondary special education programs
4. Research and development programs
5. Community-based training programs
6. Residential facilities for the handicapped
7. Vocational education programs in special centers for the handicapped
8. Special education/special needs programs or resource rooms in vocational-technical centers
9. Sheltered workshops and rehabilitation facilities
10. Work-study programs
11. On-the-job training programs
12. Employment settings
13. Summer practica in special vocational education centers
14. Leadership/policy internships in governmental and private settings
15. Projects with handicapped students in own class (for teachers)

Post-Training Placement Outcomes

Respondent programs were asked to estimate the percentage of their program graduates who moved to new professional positions following training.

Since few of the programs collected this type of information systematically, the results should be regarded as informed estimates rather than hard data. Twelve of the programs (39 percent) declines to estimate or reported that there were no program graduates as yet. Of the remaining 19 programs, the majority (11 programs--58 percent) estimated that less than half of their students moved to new positions after completing their training, and nine programs (47 percent) estimated the number at less than one-fourth. Of the eight programs (42 percent) estimating that over half of their students moved to new positions, only five (26 percent) estimated the number at over three-fourths. These results suggest that the majority of students in the surveyed programs (a) were already in professional positions focused on career/vocational education for the handicapped prior to completing training, (b) moved to such positions eventually but not immediately after training, and/or (c) applied the training to the extent possible or appropriate in professional positions not totally focused on career/vocational education for the handicapped.

Respondents were asked to describe the problems (if any) encountered in placing their program graduates. The majority reported that they were not formally involved in placing their graduates, but some had informal involvement, and others were able to report on the placement experiences of their graduates. The general response was that the market for persons with training in this area was strong, with more job positions than qualified persons. Only four (13 percent) of the respondents identified problems related to placement, and these problems pertained more to the nature and appropriateness of professional positions than to their availability. Specifically, these comments referred to (a) placement in positions involving direct service to a greater degree than was desired by the program graduates, (b) placement in

specialized roles for which the general training had not prepared the students, (c) shortage of "suitable" programs, and (d) unreceptiveness of coworkers. These findings suggest that consideration should be given to the qualitative as well as quantitative aspects of the job market in this area.

Conclusions

As in any study, the conclusions to be drawn from this survey must be stated in view of what the investigators perceive as the limitations of the study. The purpose of this survey was to determine the program design and implementation procedures being followed in preservice personnel preparation programs currently funded by the Office of Special Education in the area of vocational/career education. Although this is the primary federal funding source of personnel preparation programs at this time, the 36 programs receiving funds certainly do not constitute the totality of preservice programming in this area. As Griffin et al. (1979) indicated, many programs are also being funded at the state level or with university funds.

As previously stated, the association of this funding source with the area of special education would seem to imply that a higher percentage of special education departments could be aware of and apply for these funds, thus biasing the sample in favor of special education.

Finally, although percentages are cited to aid in comparison of data, many of these percentages are based on a small number of programs and should be interpreted with caution.

With these limitations in mind the following conclusions can be drawn for this study.

1. The largest number of programs (64 percent) are associated primarily with special education, although a significant number (24 percent) of programs offer a degree in either special or vocational education. These figures indicate an increase in joint programming efforts over that found by Brock (1979), but a much heavier percentage of special education affiliated

programs than reported by Brock (1979) or Griffin et al. (1979). Joint programming efforts appeared much more evident at the masters and specialist level than at the doctoral level.

2. Although the backgrounds of students enrolled in the programs tended to be primarily special or vocational education, an emerging number of students are entering these programs with previous preparation in other areas of education or with non-education backgrounds.

3. A variety of staffing options were employed in the programs surveyed. Although the most common training background was special education, 28 percent of the primary faculty members in the program had dual vocational/special education or vocational special needs training. This is over twice the percentage of specifically trained persons reported by Griffin et al. (1979). The most common pattern was to employ one or more persons with this training and one or more persons trained in special or vocational education, rehabilitation, or counseling. Programs without specially trained faculty met the programming need through the combined efforts of faculty from different disciplines (special or vocational education, rehabilitation, or counseling).

4. The goals of the programs appeared to fall in three specific areas, with many programs indicating more than one goal: (a) equipping special educators with a background in vocational education; (b) providing vocational educators with a background in special education; and (c) preparing vocational special needs specialists. This multiplicity of program goals should insure a continuum of personnel to provide vocational training to the special needs learners.

5. The programs surveyed tended to employ very similar training approaches. The majority of programs were offered as an emphasis area within existing degree programs, with 94 percent of the programs having one

or more separate courses in vocational special needs. Over half of the programs also infused vocational special needs content into other coursework. As other surveys have found (Brock, 1979; Griffin et al., 1981), the most common pattern was to require coursework in regular vocational education and special education in addition to courses in vocational special needs.

The personnel preparation programs surveyed appear to be responding to the needs of the field with a variety of program design and implementation options which reflect a common emphasis of cooperative efforts between special and vocational education and their related disciplines. They are working within the constraints cited by Clark and Evans (1977), building upon existing coursework and programs within their university, and capitalizing on the newly emerging supply of faculty trained specifically in the area of vocational special needs to prepare personnel to function in the variety of delivery systems related to career/vocational programming for the special needs learner.

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SECTION TWO

Development of Preservice Personnel Preparation Programs in Vocational Programming for the Special Needs Learner: A General Systems Approach

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For some time, program development has been a major concern of educators. According to Tyler (1975), the purpose of a program is to design a system to achieve an educational end. Program and curriculum development are also considered to be practical enterprises. McMahon (1972), Wenrich and Wenrich (1975), Unruh (1975), and Popham (1975) all tend to agree that program planning is the foundation of the teaching-learning process.

These and other authors also agree the term program and/or curriculum development refers to the development of a plan. It should be recognized that planning for effective change is not an easy process that is done in isolation. Regardless of the type of program being developed, there is a need to consider a systematic process as a means to achieve an appropriate end. This systematic process usually includes: (a) assessment of the needs of the target population; (b) identification objectives; (c) selection and organization of learning experiences; (d) management of resources; and (e) evaluation of the program. Such sysmtematic planning provides a basis for determining the procedures needed to gather and analyze the necessary data and makes it possble to systematically achieve needed change.

The purpose of this chapter is to present the systems approach as one method of developing preservice programs to prepare personnel to work in the area of career/vocational programming for the special needs learner.

The Systems Approach

Hoetker (1972) suggests that a system should be viewed as the sum all parts working independently and together to attain a stated objective. Systems continuously reorganize to meet new problems, to examine new complexities, and to utilize ideas and information in a renewal process. According to

Kaufman (1970), there are three general types or modes of systems approaches:

1. The design-process mode includes a complete scientific problem-solving mode and contains the following steps:
   a. Identifying "what is," or describing the current state of the system in question;
   b. Deciding "what should be," or creating an "ideal model" of the system in question;
   c. Identifying alternative strategies for getting from "what is" to "what should be" and choosing among those alternatives;
   d. Implementing the selected "solution strategy";
   e. Determing the success of the selected strategy; and
   f. Modifying the future process, or parts of it, as often as necessary.
2. The descriptive mode is an approach that operates to compare theoretical or conceptual models of the system in question and contains the following steps:
   a. Identifying alternative strategies;
   b. Choosing among those alternatives;
   c. Implementing the selected "solution strategy";
   d. Determining the success of the selected strategy; and
   e. Modifying the entire process, or parts of it, as often as needed.
3. The solution implementation mode emphasizes selection and implementation of strategies designed to reach a predetermined objective, modifying situations to be in line with a pre-established theoretical model.

Once the systems approach is considered as a means of developing personnel preparation programs, a number of specific models might come to mind.

Oliesh (1969) cited five steps in his model: (a) specifying behavioral objectives; (b) assessing students; (c) developing instructional strategies; (d) testing and revising instructional units, and (e) packaging and administering a validated learning system.

Similarly, Eraut's 1967 model cited ten steps: (a) select objectives; (b) design alternatives; (c) collect data; (d) build models; (e) weigh cost versus effectiveness; (f) test for sensitivity (g) question assumptions; (h) reexamine objectives; (i) open new aternatives; and (j) formulate problems. On the other hand, Unruh's (1975) systems model dealt with nine basic components: (a) broad goals; (b) needs; (c) objectives; (d) constraints; (e) alternatives; (f) selection; (g) implementation; (h) evaluation; and (i) modification.

Regardless of the model examined, it becomes obvious that these and other authors such as Tanner (1971), Catanese and Steiss (1970), and Wenrich and Wenrich (1974), all tend to agree that systems analysis can be applicable to program development. As Kaufman (1972) has stated, planning is the process for determining where to go and for identifying the requirements of getting there in the most effective manner. The systems approach is suggested in this chapter as an effective aid in establishing and managing program development activities for preservice personnel programs in the area of vocational programming for the special needs learner.

Application of Systems Approach to Program Development

Because of its proven success in other program development endeavors, the systems approach holds promise as a tool for use in establishing preservice personnel preparation programs in the area of vocational programming for the special needs learner. This chapter presents and outlines a three-stage systems model including: (a) program planning; (b) program implementation; and (c) program evaluation [see Figure 1]. The remaining sections will concentrate on each of the three phases and recommended activities to be carried out in each phase. The types of activities involved in each phase are listed and the most recommended development activities are then presented in more detail.

Program Planning

The planning stage includes: (a) the development of overall goals and measurable objectives; (b) the identification of problems from documented needs; (c) the identification of tasks to be completed; and (d) the identification of possible strategies and tools for attaining the objectives. Each of the planning components should be directed toward meeting the needs of the students, the university, and the potential employing agencies.

Activities related to this first stage include:

--Monitoring requests and program inquiries

--Gathering data and reports on potential students

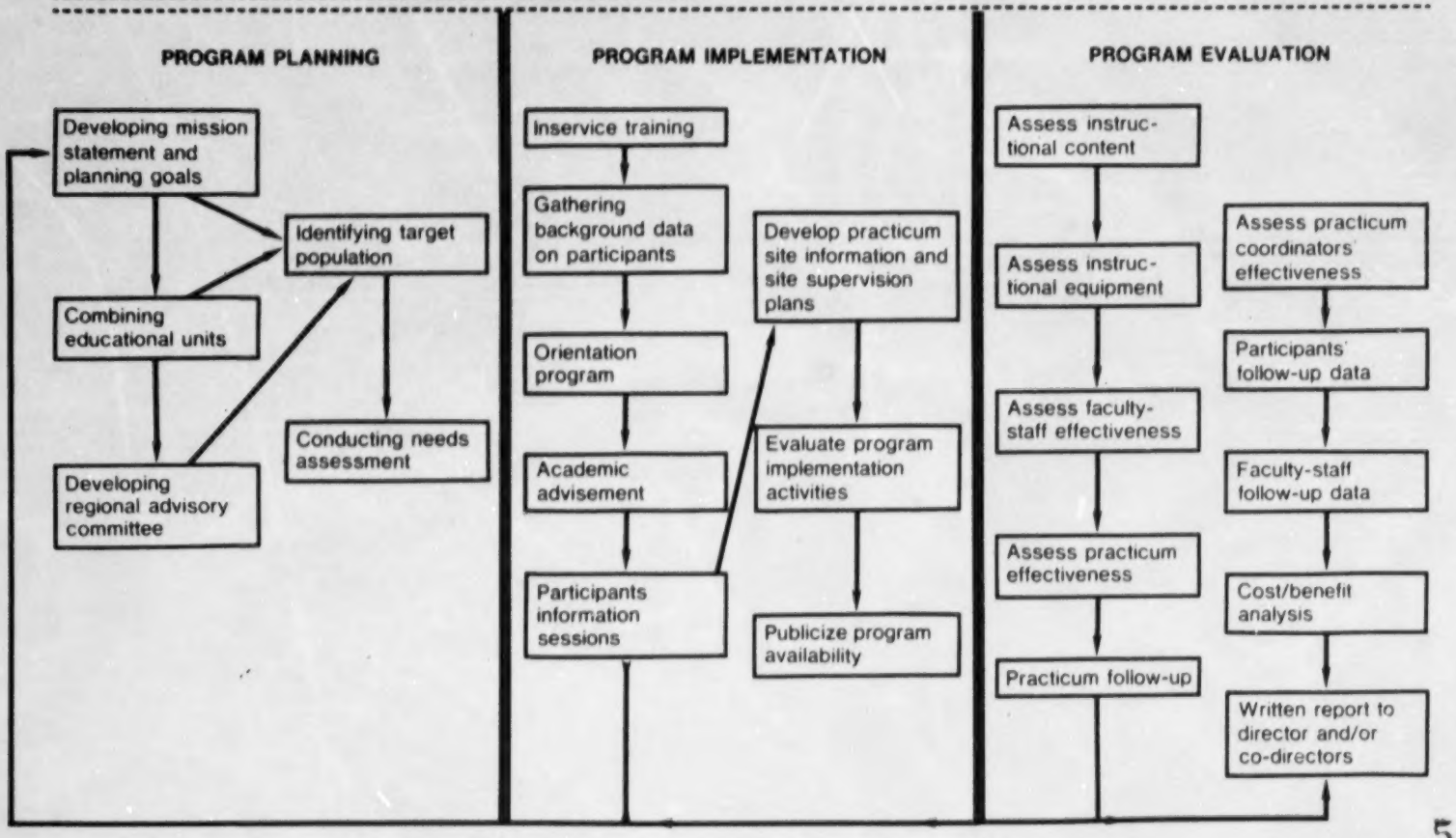
--Reviewing previous follow-up reports

--Obtaining input into program areas

--Establishing and conducting advisory committees

Figure 1

SYSTEMS MODEL FOR COMBINED VOCATIONAL/SPECIAL EDUCATION PRESERVICE PROGRAMS



Developed by J. Littlejohn, The University of Michigan, 1981

--Obtaining and analyzing professional literature

--Obtaining and analyzing studies done by various community groups

--Monitoring employment opportunities

--Developing goals and objectives

--Identifying target population

--Conducting needs assessment

--Identifying research design

--Developing a management plan

Recommended Program Planning Activities. The following activities are particularly important in planning the personnel preparation program. Each activity is listed and briefly described.

1. Conduct Needs Assessment. Before a relevant and viable preservice personnel training program can be developed, the needs of the geographic area to be served by the program must be identified. This process, however, should be concerned with projected as well as present personnel needs in the field and should carefully consider emerging trends in the delivery of vocational training to special needs learners. The needs assessment process involves designing a survey instrument that will isolate the personnel preparation needs of the area and identify personnel in the field and are most qualified to accurately respond to the instrument. Most existing programs have developed such needs assessment instruments and should be consulted to see if their instrument could be adopted to fit current information needs.

2. Develop Program Mission and Goals Statement. The mission and goals statement should relate to the needs identified in the needs assessment and should consider the students, the surrounding community, and discussions with the Dean, department chairpersons, and faculty and staff of

departments or units which may be involved in the program. Such a statement should take into account the overall mission of the university or college and programs within the state which may impact upon the newly developed program.

3. Develop Advisory Committee. Selection of advisory committee members is especially important because the committee can assist in defining educational needs at both the federal and state levels. In addition, this committee can provide necessary feedback needed for program improvement and assist in publicizing the program. Members of the advisory committee should include representatives from all disciplines involved in vocational programming for the special needs learner within the state, including secondary and postsecondary administrators, teachers and state department personnel, students, and parents of special needs learners. These representatives should be selected from the state as well as the specific geographic area served by the institution. An in-house advisory committee may also be formed, consisting of representatives of the concerned departments or units within the university.

4. Determine Delivery System. Based upon the mission statement and input from the advisory committee, a decision must be made regarding the overall delivery system for the program. Such a decision includes: (a) the department(s) in which the program will be administratively housed; (b) the degrees and endorsements/certifications associated with the program; (c) faculty/staff to be directly involved in the program; and (d) training approaches to be used, including new courses needed, infusion of content into existing coursework, and use of existing courses from the various disciplines. This stage is perhaps the most crucial in the program development process and involves looking closely at the existing resources in vocational education,

special education, counseling, vocational rehabilitation, and other related disciplines. To be optimally effective, the delivery system chosen must be tailored to the needs of the geographic area served and the strengths and limitations of the institution.

5. Develop Management Plan. The development of a management plan to coordinate all program development activities can be the key to success and/or failure of a personnel preparation program. Such a plan includes a listing of all tasks to be completed in the program planning, implementation, and evaluation stages and a timeline for completing these activities. It should also indicate the faculty member responsible for completing each activity. Other management activities include such areas as budget allocations and faculty/staff assignments.

6. Identify Target Population. The departments or units involved in program development and the advisory committee should have input in identifying the population to be trained. Activities in the area include determining entry requirements for students in terms of previous preparation and/or experience and determining the roles for which program graduates will be prepared. This phase is closely related to the program mission and goals statement and relates to such considerations as whether the program is preparing special educators who have some knowledge of vocational programming, vocational educators who have some knowledge of special needs learners, and/or specialists in vocational programming for the special needs learner.

7. Develop Student Recruitment Materials. Once the goals and objectives of the program have been identified, a recruitment brochure and student handbook with all related information should be developed. The handbook should include an overview of the program, program competencies, course requirements, and program sequence. This can be a useful tool in

program orientation. The brochure should be a condensed version of the handbook, including an overview of the program, entering requirements, and the roles for which graduates will be prepared.

Program Implementation

The program implementation stage involves the installation of the program, maintenance, and coordination of the program components. Sample activities in this phase include:

--Scheduling students, staff, and facilities
--Recruiting students and staff
--Obtaining equipment
--Planning the budget
--Developing a plan of activities
--Developing and disseminating materials

Recommended Program Implementation Activities. The program implementation activities being proposed can be of assistance to directors in achieving the objectives stated in the planning phase. Careful monitoring of all activities allows for modifications at any point in the program's operation.

1. Provide Professional Development Training for Faculty and Staff. Providing training for personnel should aid in developing effective communication lines between all personnel affected by the program. Discussions could include fusing theories, methods, and research. Other activities in this phase would relate to such areas as understanding current legislation, course requirements, providing services, and student information.

2. Implement Public Relations Plan. Program faculty/staff should be actively involved in publicizing the program. Activities could include the use of local papers, newsletters, fliers, and brochures, as well as presentations by faculty at local and state conventions and inservice workshops. Guest lectures to classes in "feeder" programs are also a good public relations technique. The advisory committee can also be of assistance in acquainting personnel with the program.

3. Develop an Orientation Program for Potential Program Participants and Staff. The development and implementation of a well-defined orientation program can be extremely important to potential students, current students, and staff in the institution. This orientation should include a discussion of the goals of the program, recent legislation, resources and services provided by the program, recent legislation, resources and services provided by the program, introduction of students, staff and advisory committee members, and course requirements. If possible, orientation meetings should be scheduled at the beginning of each academic term for new and on-going students.

4. Develop Student Files. Once students have been identified and admitted, background information should be gathered for all program participants. Files should be developed and maintained to include such information as updated program planning sheets, occupational goals, transcripts, and work and practicum experiences. Information collected after graduation should be continuously added to these files.

5. Provide Academic Advisement. Program advisors should provide academic advisement to all participants at the beginning of each term. In addition, student progress should be monitored. It is also necessary to provide informal information sessions for students throughout the academic year. Information might include discussions of new services, funds, conferences, coursework, and practicum experiences. Student handbooks developed by the staff can be useful to students and staff during the advisory period.

6. Identify Appropriate Practicum Sites. A number of sources should be utilized in identifying practicum sites for program participants. Among these sources are faculty members, advisory members, community and state leaders. Once sites have been established, supervisory responsibilities should be assigned. Students should be informed of necessary requirements. It is

crucial for practicum experiences to be monitored closely in order for students to be properly prepared for future work. Practicum sites should reflect the roles for which trainees are being prepared and the agencies in which they will be serving.

Program Evaluation

The program evaluation phase can serve two basic functions. First, it can provide continuous feedback on the effectiveness of the program components. Second, it can provide data on the impact of the program over a given period of time for use in meeting program accountability needs.

Activities related to program evaluation include:

--Determining the types of evaluation to take place
--Developing a course of action for all evaluation activities
--Conducting the actual evaluations
--Summarizing and reporting evaluation results

Recommended Program Evaluation Activities. In order for a systems approach to educational programming to be effective, the evaluation design must be developed as a parallel activity to program planning. The program evaluation stage, is divided into two types of evaluation--process and product. Process evaluation is an ongoing assessment of the overall program that permits periodic decisions regarding the adequacy of the program and allows needed modifications and revisions to be made while the program is in progress. Process evaluation may be conducted on a course, semester, or yearly basis to provide information for program decisions. Product evaluation is viewed as a terminal activity to provide impact data. On the basis of the product evaluation, the impact of individual programs and services and the overall program can be determined to provide a baseline for decisions regarding future program direction and planning. Suggested activities for each of these stages are presented in the following paragraphs.

1. Process Evaluation. This stage involves the monitoring of progress in achieving individual program objectives and in utilizing program alternatives to achieve objectives. The program's faculty and staff should develop instruments and procedures to study the effectiveness of instructional objectives; appropriateness of course offerings; appropriateness of instructional methodologies; and the effectiveness of faculty. Information should also be gathered on whether the stated program planning and implementation activities are being carried out. Each program area must be assessed. All faculty, staff, students, and administrators must be included in the evaluative process. The data collected from the evaluation must be shared with all individuals working and/or participating in the program. Process evaluation, when conducted properly, provides program staff with useful information for ongoing program modification.

2. Product Evaluation. This stage includes evaluation of the impact of the program; cost/benefit analysis; and information for revision of the program. The product evaluation should be designed to provide the information necessary to make program planning decisions as: (a) continue present program; (b) make specific modifications and revisions of program; or (c) terminate the program. These activities are conducted after the program has been stabilized and data/evidence can be provided that the program is operating as intended. Some suggested areas for examination are: observing participants at practicum sites; observing program faculty activities; surveying graduates of the program; analyzing participants' performance after completing specific core program courses; and analyzing instructional materials. After the evaluation is complete the evaluation team must make judgments regarding the effectiveness of the program. The final written summary of this evaluation provides input for future program planning and decision-making.

Summary

The purpose of this chapter was to present a systems model that could be used to develop a preservice personnel preparation program in the area of vocational programming for the special needs learner. The emphasis of this chapter has been on the systems approach in planning, implementing and evaluating such personnel preparation programs.

Clark (1977), Hartley (1977), and Phelps and Clark (1977) suggest specific strategies for the development of personnel preparation programs in vocational programming for the special needs learner. In the first section of the monograph Sitlington, Malouf, and Taymans also present data on the program design and implementation models being utilized in existing personnel preparation programs. Other sources (Albright & Clark, 1977; Clelland, Pynn, Smith, Adamson, & LaCrosse, 1979; Leadership Training Institute/Vocational and Special Education, 1981; Teacher Education Directory; Vocational Special Needs Personnel, 1978) provide examples and/or abstracts of preservice personnel programs in the area of vocational programming for the special needs learner. The reader is referred to these sources for information on specific program models.

What is clear in examining all of these sources is that the program design and delivery system chosen must be selected based on the needs of the population to be trained and geographic area to be served and the strengths and limitations of the institution in which the program is being developed. The systems approach presented here can serve as a useful tool in such program development.

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Appendices

Appendix A

Directed Telephone Interview Form

DIRECTED PHONE INTERVIEW FORM

Vocational Special Needs Preservice Models

Program Name _____

Person Interviewed _____

Interviewer _____

Date _____

These questions refer to preservice training programs in vocation special needs. (Preservice is defined as training which leads to a degree, certificate or endorsement and is based primarily on the university campus.)

I. Basic Program Orientation

1. Administratively, where is your program housed? (to which department(s) is it accountable)

___ Special Education Department
___ Vocational Education Department
___ Housed in two departments -- Specify: _____
_____
___ other _____

2. In what degree(s) does your program terminate? How many students in each?

___ Ph.D./Ed.D.
___ in vocational education
___ in special education
___ other _____
_____

___ Ed.S. (post-master's educational specialist's degree)
___ in vocational education
___ in special education
___ other _____
_____

___ Masters
___ in vocational education
___ in special education
___ other _____
_____

___ B.S./B.A.
___ in vocational education
___ in special education
___ other _____

_____

___ None

3. What state teacher certification(s) or endorsement(s) are attached to your program? ("Attached" is defined to mean that the certificate/ endorsement is automatic or a strong option in the program.)

Title

_____

_____

_____

_____

4. Does your state have a separate certification for:

___ secondary level special education
___ vocational special needs personnel

If not, is one being developed? ___ Yes ___ No

5. Does your program have an advisory committee?

___ Yes ___ No

If so, what types of people are involved in this committee?

_____

_____

_____

II. Student/Faculty Information

Type of students served by the graduate level program.

6. Are previous certification or degrees required?

___ Yes ___ No

If yes, what type? _____

7. Is previous experience required?

____ Yes ____ No
If yes, what type? _____

8. Typically, what backgrounds are represented in your students? Roughly estimate percentage for each.

____ special education
____ vocational education - list specific vocational education areas

_____

_____

_____

____ counseling/school psychology
____ non-education - list background (e.g., social service, rehabilitation)

_____

_____

_____

9. How are students recruited for your program?

_____

_____

_____

_____

Faculty

10. What are the backgrounds of primary faculty involved in this program? (list numbers). (Primary faculty are those teaching core courses or administering the vocational specific needs program.)

____ specifically training in vocational special needs area
____ vocational education
____ special education
____ other _____

_____

11. In which department(s) do the primary faculty hold appointments?

____ vocational education
____ special education

___ joint -- list departments: _____

_____

___ other _____

III. Program Goals

12. For what roles are your students being prepared? (If more than one role, rank. If necessary, indicate roles associated with different program levels - D, S, M, U)

___ vocational special needs leadership roles
___ vocational special needs specialist (i.e., work experience coordinator, vocational education resource person, vocational evaluator)
___ vocational educator with some background in special education
___ special educator with some background in vocational education
___ counselor
___ other _____

_____

13. What approach(es) does your program take in delivering vocational special needs content? (If necesary, indicate different approaches for different program levels - D, S, M, U)

___ separate degree program
___ emphasis area in a degree program
___ separate courses in vocational special needs - How many? ____
___ infusion of content into existing courses

14. What types of courses are required in your program? (If necessary, indicate different courses at different levels - D, S, M, U) - indicate V-vocational education majors, S-special education majors, B-both

A. Courses specific to vocational special needs

___ background course in vocational programming for special needs
___ methods course
___ vocational assessment
___ other - list _____

_____

_____

_____

_____

B. Regular vocational education courses

___ introduction to vocational education
___ career education
___ other - list _____

_____

_____

_____

_____

C. Regular special education courses

___ introduction/characteristics
___ secondary methods
___ assessment
___ other - list _____

_____

_____

_____

_____

15. What types of practicum/field experiences do you require for your students?

_____

_____

_____

_____

16. What has been your experience in placing your program graduates?

A. What problems (if any) have you had?

B. What percentage of your students move to new positions?

Appendix B

Preservice Personnel Preparation Programs in Vocational/Career Education Funded by the Office of Special Education

1980-81

Office of Special Education
Vocational/Career Education Grants:
Preservice Personnel Preparation

1980-81

	State	Contact Person	Phone
1.	Alabama	Dr. Dorothy Douglas ILB - 230 Department of Special Education University of South Alabama Mobile 36688	(205) 460-6460
2.	Alabama	Michael Welch, Ed.D. P. O. Box 313 University Station Birmingham 35294	(205) 934-5461
3.	California	Alice Watkins, Ph.D. Department of Special Education California State University, L.A. 5151 State University Drive Los Angeles 90032	
4.	Connecticut	Dr. Michael Williams Industrial Arts Education Dept. Room C-239 Central Connecticut State College New Britain 06050	(203) 827-7379
5.	District of Columbia	Dr. Robert Ianacone Vocational/Special Education Program George Washington University 2201 G Street, N.W. Washington, D.C. 20052	(202) 676-7328
6.	Florida	Dr. Cathy Morsink Department of Special Education University of Florida Norman Hall G315 Gainesville 32611	(904) 392-0702
7.	Florida	Dennis Teslowski Division of Vocational Education	(305) 552-2711
		Howard Rosenberg Division of Psycho-Educational Services Florida International University Tamiami Trail Miami 33199	(305) 552-2551

8.	Georgia	Dr. Frances Duncan School of Education Columbus College Columbus 30907	(404) 568-2251
9.	Georgia	Dr. Phil McLaughlin 549 Aderhold University of Georgia Athens 30602	(404) 542-1685
10.	Georgia	Dr. Wayne Sengstock Department of Special Education Georgia State University University Plaza Atlanta 30303	(404) 658-2310
11.	Georgia	Dr. Bill Weaver Georgia Southern College Statesboro 30458	(912) 681-5596
12.	Hawaii	Dr. James Apffel Univerity of Hawaii/Manoa 244 Dole Street Honolulu 96822	(808) 948-7956
13.	Idaho	Dr. A. Lee Parks Department of Special Education University of Idaho Moscow 83843	(208) 885-6159
14.	Illinois	Gertrude Meyers Department of Special Education Northeastern Illinois University 5500 North St. Louis Avenue Chicago 60626	(312) 583-4050
15.	Illinois	Dr. Frank Rusch Department of Special Education University of Illinois 288 Education Building Champaign 61820	(217) 333-0260
16.	Indiana	Dr. Dale Lawyer Department of Special Education Ball State University Muncie 47304	(317) 285-6771
17.	Indiana	Dr. Patricia Sitlington Smith Research Center Room 170 2805 E. Tenth Street Bloomington 47405	(812) 335-5847

18.	Iowa	Dr. Paul Retish Division of Special Education University of Iowa N259 Lindquist Center Iowa City 52242	(319) 353-5836
19.	Iowa	Dr. Marion Thompson Department of Special Education University of Northern Iowa Cedar Falls 50613	(319) 273-2569
20.	Kansas	Dr. Elaine Beason Special Education Program Fort Hays State University Hays 67601	(913) 628-4212
21.	Kentucky	Dr. Anne Netick Department of Special Education 201 Oppenheimer Hall University of Louisville Louisville 40208	(502) 588-6421
22.	Maryland	Dr. David Malouf Department of Special Education	(301) 454-2118
		Dr. Charles Beatty Department of Industrial Education University of Maryland College Park 20742	(301) 454-4264
23.	Michigan	Dr. Ella Bowen Program in Special Education	(313) 764-8423
		Dr. Geraldine Markel Program in Special Education University of Michigan Ann Arbor 48109	(313) 763-2374
24.	Minnesota	Norman Buktenica Education Department Moorhead State University Moorhead 56560	(218) 236-2148
25.	Missouri	Dr. Carl Cameron Department of Special Education University of Missouri - Columbia Columbia 65211	(314) 882-2713
26.	New Jersey	Dave Barnhart Career Education for the Handicapped Kean College of New Jersey Union 07083	(201) 527-2317

27.	New Jersey	Dr. Gerald Ognibene Special Education Department Glassboro State College Glassboro 08028	(609) 445-7092
28.	New Mexico	Dr. Richard McDowell Department of Special Education University of New Mexico Albuquerque 87131	(505) 277-5018
29.	Tennessee	Dr. Sid Levy Vocational/Career Education Component Vanderbilt University George Peabody College Box 328 Nashville 37203	(615) 327-8290
30.	Texas	David Gill Vocational Education Program	(713) 845-2444
		Donald Clark College of Education Texas A & M University College Station 77843	(713) 845-5311
		David Gill Vocational Education Program	(713) 845-2444
31.	Vermont	Dr. Len Albright Depts. of Special Education & Vocational Education University of Vermont Burlington 05405	(802) 656-2001
32.	Vermont	Dr. Martha Knight Department of Special Education Waterman Building University of Vermont Burlington 05401	(802) 656-2936
33.	Washington	Dr. Ronald Murphy Department of Education Cleveland Hall Washington State University Pullman 99164	(509) 335-7064
34.	Washington	Dr. Greg Weisenstein Department of Special Education 103 Miller Hall DQ-12 University of Washington Seattle 98195	(206) 543-1827

35.	West Virginia	Iva Dean Cook Department of Special Education West Virginia College of Graduate Studies Room 811 Sullivan Hall Institute 25112	(304) 768-9711
36.	Wisconsin	Dr. Stephen Bavolek Department of Special Education University of Wisconsin - Eau Claire Eau Claire 54701	(715) 836-5511
37.	Wisconsin	Dr. John Houle Department of Education & Psychology 221 Harvey Hall University of Wisconsin - Stout Menomonie 54751	(715) 232-2478